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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,210	10/17/2003	Michael Przybilski	944-005.015	6654
4955	7590	10/16/2006	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			WU, JUNCHUN	
			ART UNIT	PAPER NUMBER
			2196	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,210

Applicant(s)

PRZYBILSKI ET AL.

Examiner

Junchun Wu

Art Unit

2196

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

1. Claims 1-18 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, and 5 are reject under 35 U.S.C. 102(e) as being anticipated by Ji et al. (U.S. Patent No. 6836657 B2 hereafter “Ji”).

4. For claim 1 Ji teaches a method for updating software stored in a memory of a mobile device (col.6 lines 19-26), comprising the steps of: updating a memory block of the memory by merging said memory block with differential information from a differential file stored in the memory (col.11 lines 43-46 col.5 lines 7-11 & Fig.6); storing the updated memory block in a backup memory area of the memory (col.11 lines 46-49); determining whether the updated block stored in the backup memory area is correct (col.11 lines 46-49 & col.10 lines 58-61); copying the updated block from the backup memory area to an original location, if the updated block is correct (col.11 65-67 & col.12 lines 1-2).

5. For claim 2, Ji teaches if the updated block is correct, further comprising the step of: writing a new block status (col.11 lines 49-61).
6. For claim 5, Ji teaches the differential file is installed and stored in a user file system area of the memory (col.11 lines 34-38).
7. Claims 15-17 are reject under 35 U.S.C. 102(e) as being anticipated by Rao (U.S. Pub. No. 2004/0123282 A1).
8. For claim 15, Rao teaches a memory of a mobile device, comprising: an update-application area for storing an update-application for updating software of the memory ([0010], [0026] an update package comprising at least one update instruction selecting one of the plurality of banks, and converting the selected bank from the first code version to the second code version using the at least one update instruction. The mobile handset may download update package from the server to update firmware or software stored in non-volatile memory); a backup area for temporarily storing the memory block that is updated ([0027]); and an update-application checksum area for storing the checksum ([0029]).
9. For claim 16, Rao teaches the update-application area, the backup area and the update-application checksum area are located in an update means area of the memory ([0027]).

Art Unit: 2196

10. For claim 17, Rao teaches the memory of claim 15, further comprising a differential file for updating the software of the memory ([0012] a method which update an electronic device from a first code version to second code version in the non-volatile memory).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ji, in view of Shipp (US Pub No. 2005/0049997 A1).

13. For claim 6, Ji teaches differential file, but does not teach downloaded it by a user. However, Shipp teaches differential file is downloaded by a user ([0033]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teachings by downloading differential file by a user as taught by Shipp in order to facilitate if client needs to get updates then it downloads the differential files from server/network and synchronizes the differential files to generate the new file.

14. Claims 3, 4, 7, 8, 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ji, in view of Rao.

15. For claim 3, Ji does not teach the software to be updated is located in a software image area of the memory, but Rao teaches the software to be updated is located in a software image area of the memory ([0026], the mobile handset download update package from the server to update firmware/software stored in non-volatile memory). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teachings by locating the software to be updated in a software image area of the memory as taught by Rao in order to execute updating software in non-volatile memory if the bootstrap code determines that an update package is available with which to update the firmware/software in the mobile handset ([0025]).

16. For claim 4, Ji does not teach the software to be updated is located in a variant software area of the memory, but Rao teaches the software to be updated is located in a variant image area of the memory ([0026], the mobile handset download update package from the server to update firmware/software stored in non-volatile memory). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teaching by locating the software to be updated in a variant software area of the memory as taught by Rao in order to execute updating software in non-volatile memory if the bootstrap code determines that an update package is available with which to update the firmware/software in the mobile handset ([0025]).

Art Unit: 2196

17. For claim 7, Ji fails to teach checking validity of an update-application stored in the memory, but Rao teaches checking validity of an update-application stored in the memory. ([0026], [0029]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teaching by checking validity an update-application stored in the memory as taught by Rao in order to enhance the performance by using a fault tolerant update, each update package stored on the update server may contain predetermined verification information for each bank of the non-volatile memory to be updated. The predetermined verification information may comprise the expected value of a CRC, MD5 checksum, or similar calculated value for each of the corresponding banks following a successful update. (Rao[0035]).

18. For claim 8, Ji fails to teach the update-application is stored in an update-application area of the memory and in a backup area of the memory, but Rao teaches the update-application is stored in an update-application area of the memory and in a backup area of the memory ([0027]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teachings by storing the update-application in an update-application area of the memory and in a backup area of the memory by Rao in order to ensure that the original code is not corrupted by unexpected processing errors or power interruptions. Furthermore, the existing of the backup bank helps to insure fault tolerance in the event of power interruptions and reboot or reset operations ([0027]).

Art Unit: 2196

19. For claim 9, Ji teaches wherein the update-application is valid (col.11 lines 43-49, the upgrade client generates the new EBSC (i.e. update application) by using the copy of original EBSC and the upgrade file which include difference file), and before the step of updating the software, further comprising the steps of: checking if the differential file contains data for updating the software, and reading the data for updating the software from the differential file if said data is available (col.15 lines 1-9).

20. For claim 11, Ji teaches wherein the update-application is valid, and before the step of updating the software, further comprising the steps of: checking if the differential file contains information for updating the update-application, and updating the update-application, verifying it and writing a new checksum for the updated update-application, if the differential file (21) contains information for updating the update-application (col.17 lines 19-39 & Fig.12).

21. For claim 12, Ji teaches checking the validity of the update-application is verified by comparing a checksum or a backup checksum generated for an update-application stored in an update-application area of the memory or in a backup area of the memory, respectively (col.15 lines 47-51), with an original checksum stored in the memory to verify that both checksums are identical (col.9 lines 1-11).

22. For claim 13, Ji teaches the original checksum is stored in an update-application checksum area of the memory (col.9 lines 1-11).

Art Unit: 2196

23. For claim 14, Ji teaches the checksum and the original checksum are not identical but the backup checksum and the original checksum are identical, further comprising the step of: writing the update-application from the backup area to the update-application area (col.11 lines 65-67 & col.12 lines 1-2).

24. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Ji, in view of Rao and in further view of O'Neill (US Pub No. 2004/0215755 A1).

25. For claim 10, Ji fails to teach determining if there is a further block that needs to be updated by identifying a last updated block from a status, and writing new checksums for an updated software if there is no the further block to be updated, but O'Neill teaches determining if there is a further block that needs to be updated by identifying a last updated block from a status, and writing new checksums for an updated software if there is no the further block to be updated ([0157] & Fig.11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji by the claim stated above as taught by O'Neill in order to determine if there is next bank needs to be updated by validate the status table information. Additionally, a bank pointer is point to the location where the bank update will take place. Upon completion of one bank update, the process proceeds to a new state where the bank pointer is incremented to the next consecutive bank that is to be updated ([0137]).

26. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ji, in view of O'Neill.

For claim 18, Ji teaches a method for updating software stored in a memory of a mobile device comprising the steps of: checking validity of an update-application stored in the memory ([col.15 lines 47-51]), wherein said update is done by overwriting a block with the differential information at a location in the memory that is different from an original memory location of said memory block in the memory, wherein said update-application is used for facilitating said updating (col.11 lines 40-49), Ji does not teach updating the software using a block-by-block approach based on differential information from a differential file downloaded to and stored in the memory if the update-application is valid. However, O'Neill teaches updating the software using a block-by-block approach based on differential information from a differential file downloaded to and stored in the memory if the update-application is valid ([0013], [0129]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ji's teaching by updating the software using a block-by-block approach as taught by O'Neill in order to overcome the memory or storage space constraints of the electronic device by providing a mechanism for performing updates in a sectional or bank-by-bank manner. The bank-by-bank updating method does not require an entire image of a file or code version to be stored in a "working" area, rather the update operations are performed using a reduced amount of memory or storage space by subdividing the update operations and applying them sequentially to designated code sections ([0127]).

Art Unit: 2196

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on Flexible.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-hady can be reached on 571-272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWu

10/10/06


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